

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/002505 A3

(51) International Patent Classification⁷: **C12Q 1/00**,
A61K 39/00, A01N 61/00

(21) International Application Number:
PCT/US2004/016419

(22) International Filing Date: 24 May 2004 (24.05.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/473,224 23 May 2003 (23.05.2003) US
60/539,769 28 January 2004 (28.01.2004) US

(71) Applicant: **JOHNS HOPKINS UNIVERSITY** [US/US];
100 N. Charles Street, 5th Floor, Baltimore, MD 21201
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHATTERJEE**,
Subroto, B. [US/US]; 6098 Sebring Drive, Columbia, MD
21044 (US). **KWITEROWICH**, Peter, O. [US/US]; 408
Woodlawn Road, Baltimore, MD 21210 (US).

(74) Agents: **ROSENFELD**, Jennifer, K. et al.; Edwards &
Angell, LLP, P.O. Box 55874, Boston, MA 02205 (US).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
23 June 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **APOLIPOPTEIN C-1 INDUCED APOPTOSIS**

(57) Abstract: The present invention provides methods and compositions for identifying compounds which inhibit ApoCI and which are useful in the treatment or prevention of atherosclerosis, plaque rupture, apoptosis, or myocardial infarction. The invention further provides methods for treating subjects suffering from or at risk of developing atherosclerosis, plaque rupture, apoptosis, or myocardial infarction. The invention further provides methods for diagnosing subjects at suffering from or at risk of developing treatment or prevention of atherosclerosis, plaque rupture, apoptosis, or myocardial infarction.



WO 2005/002505 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/16419

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : C12Q 1/00; A61K 39/00; A01N 61/00 US CL : 424/184.1; 435/4; 514/1 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S. : 424/184.1; 435/4; 514/1 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST EMBASE BIOSIS LIFESCI MEDLINE		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Bjorkegren et al. Postprandial Enrichment of Remnant Lipoproteins with ApoC-I in Healthy Normolipidemic Men with Early Asymptomatic Atherosclerosis. Arteriosclerosis Thrombosis and Vascular Biology. September 2002, Vol. 22 No. 9, pages 1470-1474, see entire document	1
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E"	earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P"	document published prior to the international filing date but later than the priority date claimed	
Date of the actual completion of the international search 29 March 2005 (29.03.2005)		Date of mailing of the international search report 13 MAY 2005
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer Patrick J. Nolan <i>Patrick J. Nolan</i> Telephone No. 703-308-0196